

Notice of Allowability

Application No.

10/771,854

Applicant(s)

LAM ET AL.

Examiner

Stephen Elmore

Art Unit

2185

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the RCE filed December 7, 2006.
2. ☒ The allowed claim(s) is/are 1-74.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date 12/7/06
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/~~Comment~~
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


STEPHEN C. ELMORE
PRIMARY EXAMINER

EXAMINER'S AMENDMENT and REASONS FOR ALLOWANCE

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

2. The application has been amended as follows:

IN THE SPECIFICATION

page 12, line 2, after "17, 2002, " insert --now U.S. Patent 7,058,788, --.

REASONS FOR ALLOWANCE

3. The following is an examiner's statement of reasons for allowance:

In independent claims 1, 13, 25, 37, 49, 62, 68 and 74, directed towards a method and system for storing data, the following features taken in combination with the remaining limitations of the independent claims are not found in and/or are not obvious in view of the prior art of record,

Claim 1,

"detecting a change in the criterion to a second status" and "in response to the change, storing data pursuant to the delta replication operating mode";

Claim 13,

"ascertaining a first status of a criterion pertaining to an activity performed by the one or more data storage systems while operating in the delta replication operating mode";

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Claim 25,

"detecting a change in the criterion to a second status" and "store data in the one or more data storage systems pursuant to the delta replication operating mode, in response to the change";

Claim 37,

"a processor configured to: ascertain a first status of a criterion pertaining to an activity performed by the one or more data storage systems while operating in the delta replication operating mode" and "in response to the change, store data pursuant to an alternative mode";

Claim 49,

"determining a condition; and in response to the condition: storing second data in the at least one first storage device; and recording one or more memory locations associated with the storing of the second data in the at least one first storage device";

Claim 62,

"in response to the detected first condition: storing data in the at least one first storage device; and recording in a database information identifying one or more data blocks in the at least one first storage device that are changed;" and "copying the one or more data blocks from the at least one first storage device to the at least one second storage device, based on the information, in response to the detected second condition";

Claim 68,

"if the first status is detected: causing the data to be stored" and "if the second status is detected: storing the data in the at least one first storage device; and recording one or more storage locations of the stored data in the at least one first storage device";

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Claim 74,

"determine a condition; and in response to the condition: store second data in the at least one first storage device; and record one or more memory locations associated with the storing of the second data in the at least one first storage device".

Conclusion


Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen Elmore whose telephone number is (571) 272-4436. The examiner can normally be reached on Mon-Fri from 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sanjiv Shah can be reached on (571) 272-4098. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

January 6, 2007


STEPHEN C. ELMORE
PRIMARY EXAMINER